AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A method for accessing data in a computer, the computer comprising:

a non-volatile memory, the non-volatile memory comprising a first portion and a second portion, the first portion storing the basic input/output system (BIOS) of the computer, the second portion comprising a plurality of blocks as basic storage units for storing data; and

a volatile memory comprising a plurality of sectors corresponding to the blocks of the second portion of the non-volatile memory; ~~, the non-volatile memory comprising a first portion and a second portion, the first portion storing the basic input/output system (BIOS) of the computer,~~

the method comprising:

establishing a mapping table in the volatile memory for mapping relation between the blocks of the second portion of the non-volatile memory and the sectors of the volatile memory;

~~(a)~~ allocating data stored ~~inthe~~ in the blocks of the second portion of the non-volatile memory to the corresponding sectors of the volatile ~~memorywhen~~ memory when the computer starts up;

~~(b)~~ updating corresponding data stored in the volatile memory when a user wants to ~~updatedata~~ update data stored in the second portion of the non-volatile memory; and

~~(c)~~ writing back the data in the volatile memory to the second portion of the non-volatile ~~memorywhen~~ memory when the computer is ready to shut down.

Claim 2 (original): The method of claim 1, wherein when the user wants to update the data stored in the second portion of the non-volatile memory, a corresponding update operation is executed in the volatile memory without modifying the data in the second portion of the non-volatile memory.

Claims 3-5 (cancelled).

Claim 6 (currently amended): The method of ~~claim 5~~ claim 1, wherein when the user wants to read data stored in one of the blocks of the second portion of the non-volatile memory, the computer reads data stored in the corresponding sector of the volatile memory.

Claim 7 (currently amended): The method of ~~claim 5~~ claim 1, wherein the computer updates data stored in the portion of the non-volatile memory according to the mapping table when the computer is ready to shut down.

Claim 8 (currently amended): The method of ~~claim 5~~ claim 1, wherein ~~step (c)~~ writing back the data in the volatile memory to the second portion of the non-volatile memory when the computer is ready to shut down further comprises:

updating the mapping table for changing the mapping relation between the sectors and the blocks; and

restoring the data in the sectors of the volatile memory to the second portion of the non-volatile memory according to the updated mapping table.

Claim 9 (currently amended): The method of ~~claim 5~~ claim 1, further comprising establishing a second mapping table in the non-volatile memory when the computer is ready to shut down.

Claim 10 (currently amended): The method of ~~claim 5~~ claim 1, wherein the mapping table is established from a reference mapping table stored in the non-volatile memory when the computer starts up.

Claim 11 (currently amended): The method of ~~claim 5~~ claim 1, wherein the computer updates the data in the blocks corresponding to the sectors with updated data according to the mapping table when the computer is ready to shut down.

Claim 12 (original): The method of claim 1, wherein the computer is an information appliance (IA).

Claim 13 (original): The method of claim 1, wherein the non-volatile memory is a flash memory, and the volatile memory is a random access memory (RAM).

Claim 14 (currently amended): A computer comprising:

a non-volatile memory comprising a first portion for storing the basic ~~input/outputsystem~~ input/output system (BIOS) of the computer and a second portion, the second portion of the non-volatile memory comprising a plurality of blocks as storage units for storing data;

a volatile memory for storing data temporarily during operation of the computer, wherein the volatile memory comprises a plurality of sectors corresponding to the blocks of the second portion of the non-volatile memory; and

a processor;

wherein the processor establishes a mapping table in the volatile memory for recording a mapping relation between the blocks of the second portion of the non-volatile memory and the sectors of the volatile memory; the processor allocates data stored ~~inthe~~ in the blocks of the second portion of the non-volatile memory to the corresponding sectors of the volatile ~~memorywhen~~ memory when a user starts up the computer; the processor updates data stored in the volatile memory when the user wants to update corresponding data stored in the second portion of the non-volatile memory; and the processor writes back the updated data in the volatile memory to the non-volatile ~~memorywhen~~ memory when the user is ready to shut down the computer.

Claim 15 (original): The computer of claim 14, wherein when the user wants to update the data stored in the second portion of the non-volatile memory, a corresponding update operation is executed in the volatile memory without modifying the data in the second portion of the non-volatile memory.

Claims 16-18 (cancelled).

Claim 19 (currently amended): The computer of ~~claim 18~~ claim 14, wherein when the

user wants to read data stored in one of the blocks of the second portion of the non-volatile memory, the computer reads data stored in the corresponding sector of the volatile memory.

Claim 20 (currently amended): The computer of ~~claim 18~~ claim 14, wherein the computer updates data stored in the second portion of the non-volatile memory according to the mapping table when the user is ready to shut down the computer.

Claim 21 (currently amended): The computer of ~~claim 18~~ claim 14, wherein when the user is ready to shut down the computer, a process executed by the processor comprises:

writing back the mapping table for changing the mapping relation between the sectors and the blocks; and

restoring data stored in the sectors of the volatile memory to the second portion of the non-volatile memory according to the updated mapping table.

Claim 22 (currently amended): The computer of ~~claim 18~~ claim 14, wherein the processor establishes a second mapping table in the non-volatile memory when the user is ready to shut down the computer.

Claim 23 (currently amended): The computer of ~~claim 18~~ claim 14, wherein the mapping table is established from a reference mapping table stored in the non-volatile memory when the user starts up the computer.

Claim 24 (currently amended): The computer of ~~claim 18~~ claim 14, wherein the computer updates data of the blocks corresponding to the sectors with updated data according to the mapping table when the user is ready to shut down the computer.

Claim 25 (original): The computer of claim 14, wherein the computer is an information appliance (IA).

Claim 26 (original): The computer of claim 14, wherein the non-volatile memory is a flash memory, and the volatile memory is a random access memory (RAM).

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